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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,679	04/16/2001	Majid Anwar	PGLD-P01-004	6220
28120	7590	08/12/2004	EXAMINER	
ROPE & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			NGUYEN, MAIKHANH	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/835,679

Applicant(s)

ANWAR, MAJID

Examiner

Maikhanh Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 40- 80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40- 80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/01, 11/01, 7/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This action is responsive to communications: Preliminary Amendment filed 07/01/2004 to the original application filed 04/16/2001; IDS filed 11/27/2001, 08/07/2001, and 07/07/2004.
2. Claims 40- 80 are currently pending in this application. Claims 40 and 75-76 are independent claims.

**Priority**

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d), and based on application # 0009129.8 filed in United Kingdom on 04/14/2000, which papers have been placed of record in the file.

**Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 40-70 and 72-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Alam et al.** (U.S. 6,336,124 – filed 07/1999).

**As to independent claim 40**, Alam teaches a method for representing digital content (*col.1, line 60-col.2, line 11*), comprising the steps:

- providing a plurality of document agents each adapted to translate source data in at least one of a predetermined number of formats associated with a plurality of source applications into a

predetermined internal presentation format which is independent of the source data format so that the internal representation may be processed to display the digital content independently of the source application (*col.2, lines 12-17; col.5, lines 35-42*);

- receiving a source of data representative of the digital content in one of the predetermined formats generated by a first of the plurality of source applications (*items 302 and 304, Fig.4*);

- identifying a particular document agent from among the plurality of document agents that is suitable for translating the source data into the internal representation format (*col.6, lines 33-49 and Fig.6*);

- using the identified document agent to translate the source data into an internal presentation of the digital content (*col.6, lines 32- 49*), the translation including:

- \* identify objects that occur within the source data and for each object within the source data, creating a document object that represents an internal representation of the identified object and that separates the structure of the object from the data content of the object (*col.2, lines 12-27 and col.7, lines 10-21*),

- \* organizing the document objects into a document structure that represents the structure of the digital content, and organizing the data content of the objects into a data content structure (*col.7, lines 12-48*).

While Alam teaches the association of the document objects within the document structure and the data content stored in the data content structure (*col.2, lines 18-27*), Alam does not explicitly teach “a set of pointers”.

It would have been obvious to person of ordinary skill in the art at the time the invention was made to have applied Alam's teaching to include "a set of pointers" because it would have provided an accurate and efficient system for converting a digital document stored in one format to different formats for manipulation and display.

The fact that Alam's teaching "*the input document is received over a network ... Heading of the input document may be located to generate a linked table of contents page containing the heading, each table of content heading containing a link to the heading contained in the output document*" (col.2, lines 36-45) and purpose of using the links in Alam suggests that a set of pointers are provided to associate the documents objects within the document structure and the data content stored in the data content structure.

**As to dependent claim 41**, Alam teaches creating an indirection list that stores the set of pointers that associate the document objects with the data content (*col.2, lines 36-63*).

**As to dependent claim 42**, Alam teaches receiving a stream of data generated from an application program (*col.2, lines 37-40*).

**As to dependent claim 43**, Alam teaches receiving a stream of data generated from streaming data from an application program (*col.2, lines 37-40*).

**As to dependent claim 44**, Alam teaches receiving a stream of data from a peripheral device (*col. 5, lines 65- col.6, line 8*).

**As to dependent claim 45**, Alam teaches receiving a stream of data from a plurality of sources of data (*col.1, line 60-col.2, lines 11*).

**As to dependent claim 46**, Alam teaches merging document objects found in a first source of data and a second source of data for building a composite document structure (*col.7, lines 25-31*).

**As to dependent claim 47**, Alam teaches organizing the document objects into a document structure that represents the structure of the digital content, includes filtering the document objects to select a sub set of document objects for the document structure (*col.7, lines 12-48*).

**As to dependent claim 48**, Alam teaches organizing the document objects into an arrangement that differs from the structure of the source of data (*Fig.7 and associated text*).

**As to dependent claim 49**, Alam teaches adding document objects to alter the structure of the digital content (*col.7, lines 32-48*).

**As to dependent claim 50**, Alam teaches filtering content to select content for the internal representation (*col.2, lines 55-62*).

**As to dependent claim 51**, Alam teaches adding content to select content for the internal representation (*col.2, lines 55-62*).

**As to dependent claim 52**, Alam teaches substituting data from a first source with data from a second source by processing the pointers to rearrange the association between the data content and the document objects (*col.2, lines 37-45*).

**As to dependent claim 53**, Alam teaches compacting document objects by combining document objects having similar attributes (*col.8, lines 35-56*).

**As to dependent claim 54**, Alam teaches building a resource table for storing resources identified within a source of data (*Fig.14 and associated text*).

**As to dependent claim 55**, Alam teaches the resources include resources selected from the group consisting of fonts, colour lists, styles and links (*col.6, lines 50-67*).

**As to dependent claim 56**, Alam teaches one of storing and delivering data content independently from the document structure (*col.9, lines 12-29*).

**As to dependent claim 57**, Alam teaches compressing the data content (*col.6, lines 38-49*).

**As to dependent claim 58**, Alam teaches encoding the data content (*col.12, lines 53-67*).

**As to dependent claim 59**, Alam teaches compressing the document structure (*col.6, lines 38-49*).

**As to dependent claim 60**, Alam teaches encoding the document structure (*col.12, lines 53-67*).

**As to dependent claim 61**, Alam teaches a document object may include position information representative of a position of content within a document (*col.8, lines 15-34*).

**As to dependent claim 62**, Alam teaches the position information may be one of relative position information and fixed position information (*col.8, lines 35-56*).

**As to dependent claim 63**, Alam teaches the document structure defines position information representative of the location of an object relative to other objects in a document structure (*col. 8, lines 15-34*).

**As to dependent claim 64**, Alam teaches the document structure includes document objects having a set of defined parameters including dimensional, temporal and physical parameters (*col.7, line 57-col.8, line 9*).



**As to dependent claim 65**, Alam teaches a visual position for content in an internal representation is tracked separately from a structural position of that content in a document (*col.8, lines 15-56*).

**As to dependent claim 66**, Alam teaches the digital content includes content selected from the group consisting of text, graphic, audio, video, interactive, script and audio-visual (*col.6, lines 50- 67*).

**As to dependent claim 67**, Alam teaches exporting digital content (*col.7, line 57-col.8, line 9*).

**As to dependent claim 68**, Alam teaches exporting digital content includes exporting digital content in a format representative of the internal representation (*col.7, line 57-col.8, line 9*).

**As to dependent claim 69**, Alam teaches exporting digital content includes exporting content in a format compatible with a selected known file format (*col.7, lines 24-31*).

**As to dependent claim 70**, Alam teaches the format representative of the internal representation may be based on a structure selected from the group consisting of a binary data structure, a textual description, a marked-up text description, and a luminance/chrominance colour model (*col.12, lines 53-67*).

**As to dependent claim 72**, Alam teaches the document objects include associated styling information (*col.7, lines 57-67*).

**As to dependent claim 73**, Alam teaches the styling associated with a document text object includes font typeface, font size, whether the characters are bold, italic, or otherwise stylized (*col.6, lines 50-57*).

**As to dependent claim 74**, Alam teaches the styling information includes page style information (col.7, lines 24-55).

**As to independent claim 75**, it is directed to a computer readable medium for implementing the method of claim 40, and is similarly rejected under the same rationale.

**As to independent claim 76**, it is directed to a system for performing the method of claim 40, and is similarly rejected under the same rationale.

5. Claim 71 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Alam et al.** in view of **Meltzer et al.** (U.S. 6,125, 391 – filed 10/1998).

**As to dependent claim 71**, Alam does not explicitly teach “the format representative of the internal representation may be based on a universal text encoding model including an encoding selected from the group consisting of Unicode, shift-mapping and big-5.”

Meltzer teaches the format representative of the internal representation may be based on a universal text encoding model including an encoding selected from the group consisting of Unicode, shift-mapping and big-5 (*col.4, lines 44-50*).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the feature from Meltzer in the system of Alam in order to obtain a digital document processing system capable of translating documents into various forms and formats.

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Coleman	U.S Patent No. 5,708,828	issued: Jan. 13, 1998
Jack et al.	U.S Patent No. 5,119,465	issued: Jun. 2, 1998
Wright	U.S Patent No. 4,751,740	issued: Jun. 14, 1998
Helgeson et al.	U.S Patent No. 6,643,652	issued: Nov. 4, 2003

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (703) 306-0092.


The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on (703) 305-9792.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maikhanh Nguyen  
August 4, 2004

  
JOSEPH H. FEILD  
PRIMARY EXAMINER